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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,370

03/24/2006

Hisao Yoshioka

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EXAMINER

JANCA, ANDREW JOSEPH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,370	Applicant(s) YOSHIOKA, HISAO	
	Examiner Andrew Janca	Art Unit 4112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

1. This is the initial Office action based on the 10/573,370 application filed September 22, 2004.
2. Claims 9-18 are pending and have been fully considered. Claims 1-8 were cancelled in the amendment filed March 24, 2006.
3. Line numbers in US patents will be referred to by "xx:yy", where "xx" is the column number and "yy" are the line numbers. When two columns on the same page share the same column and line numbers, they will be distinguished by A or B, for example "4.A:44" for columns 4, line 44 in the first (left) column. Paragraphs in published US applications will be referred to by "Pzz", where "zz" is the paragraph number.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,711,602 to ROHRING et al, in view of US 1,874,920 to DEHUFF and US 2,182,921 to HERTER.

7. With regard to independent claim 9, ROHRING et al. teach an agitator 19, which

- a. is mounted in a vessel 30 with a bottom and a circumferential wall;
- b. is attachably and detachably mounted on a supporting member 16, extending downward on an agitating device;
- c. rotates in relation to the vessel, due to rotation of the supporting member (1:60-62);
- d. to agitate a liquid in the vessel (1:49-50);
- e. comprises four biased agitating blades 19a, arranged to contact a virtual circumferential face of a virtual cylinder, which is centered on a vertically extending virtual central axis (figure 4);
- f. with one end of each blade, in the circumferential direction of its central axis, resting on an inner face facing the central axis of an adjoining biased agitating blade, and the other end in the circumferential direction of the central axis protruding to back away from the central axis than an adjoining blade on the other side, in the circumferential direction of the central axis (figures 1 and 3).
- g. ROHRING et al. do not teach blades provided with penetrating windows, nor blades that are separably connected to each other.

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h. However, DEHUFF provides a blade with penetrating windows (figure 1); and HERTER teaches agitating blades 17 which are separably connected to each other via connector piece 14 (1A:46-50).

i. ROHRING et al., DEHUFF, and HERTER are analogous arts, for they are from the same field of endeavor, namely the art of rotatory blenders for food.

j. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to give the overlapping blades of ROHRING et al. penetrating windows such as those of DEHUFF, and to make them separately detachable and reattachable as are the blades of HERTER.

k. The motivation to provide windows would have been to adapt the beater blades of ROHRING et al, designed for soups, to the more rigorous consistency of doughs (DEHUFF 1:2-3); and to make the blades detachable, to facilitate their cleaning (HERTER 2A:40-44).

l. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the blending arts, at the time the invention was made.

8. The additional elements of claims 10 and 11, that the blades should either contact a virtual sphere [claim 10] or a virtual cylinder [claim 11], are taught by DEHUFF (the virtual sphere whose bottom is defined by the hemispherical bottom of bowl 59, figure 1) and HERTER (the flat and parallel ends of the blades, shown in figure 4) respectively.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROHRING et al., DEHUFF, and HERTER as applied to claims 9-11 above, and further

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in view of US 1,872,004 to RATAICZAK et al. ROHRING et al. teach that their blades 19 be detachable from supporting member 16, but do not appear to explicitly teach an additional connecting member connecting them; and the connecting member of HERTER connects only the blades to each other, and not to a supporting member. However, RATAICZAK et al. teach a separate connecting member, stud end 53 with pin 58 (figure 2), detachably and attachably mounted on their device's supporting member, shaft 21 (2:8-15, 2:35-44). RATAICZAK et al. is analogous art to ROHRING et al., DEHUFF, and HERTER since it too concerns rotatory blenders for food. At the time the invention was made, it would have been obvious to one of ordinary skill in the blending arts to replace the simple peg-in-hole connection between blades and support member of ROHRING et al. with the extra connecting members of RATAICZAK et al, in order to securely but loosely fasten the blades so that they might better adjust themselves to irregularities in the bowl which they closely scrape on their revolutions (RATAICZAK et al. 2:38-44). Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROHRING et al., DEHUFF, and HERTER as applied to claims 9-11 above, and further in view of US 4,175,875 to VAN HORBEK. ROHRING et al., DEHUFF, and HERTER do not appear to teach, but VAN HORBEK does teach, plate-type radial agitating blades 22 and 24 disposed on the lower side of his mixer 1 (figure 3); the end edges of which are parallel to the central axis, and extend radially from it; and which are provided with penetrating windows 23. ROHRING et al., DEHUFF, HERTER, and VAN HORBEK are

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analogous arts because they are from the same problem-solving area, how to most efficiently mix fluid products with a rotating beater. At the time the invention was made, it would have been obvious to one of ordinary skill in the blending arts to add the blades of VAN HORBEK to the apparatus of ROHRING et al, and connect them separably as are the blades of HERTER. The motivation would have been to more efficiently mix the contained fluid, by mimicking the physical effects of boiling (VAN HORBEK 1:30-37). Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

11. The additional element of claim 14, that the spacing between the frames of each window of the larger biased blades be greater than those of the smaller, interior radial blades, is taught by DEHUFF, who makes the interior windows of his mixing blade smaller in size than those windows on the blade's periphery (figure 1).

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROHRING et al., DEHUFF, HERTER, and VAN HORBEK as applied to claim 13 above, and further in view of US 3,132,849 to KRITIKSON. KRITIKSON teaches the addition of coil springs 14 on the main frame of his mixing device, in order to act as additional mixing elements (1:55-57). KRITIKSON is analogous art to ROHRING et al., DEHUFF, HERTER, and VAN HORBEK because they all concern rotatory mixers for fluid contents. At the time the invention was made, it would have been obvious to one of ordinary skill in the mixing arts to mount the coil spring of KRITIKSON between the window frames of ROHRING et al., DEHUFF, HERTER, and VAN HORBEK, in order to adapt their mixer to stir heavy, sticky foods requiring constant stirring over a long time,

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such as fudge (KRITIKSON 1:20-24). Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

13. The additional element of claim 16, dependent directly upon claim 9, adds a spring in an identical fashion as claim 15, and so is also taught by KRITIKSON as described in the preceding paragraph.

14. The additional elements of claim 17 are taught by ROHRING et al., who provides a mixing machine for his agitator (figure 1), comprising a supporting member 21 extending downward (figures 1 and 2), a vessel 14 with a bottom and circumferential wall which is mounted on the mixer (figure 1); and where the agitator is attachably and detachably mounted on the supporting member (2:8-10), and is adapted to rotate in relation to the vessel, due to rotation of the supporting member, to agitate a material in the vessel (2:10-15).

15. The additional element of claim 18, specifying an agitating device identical to that described by claim 17, but having a plurality of agitators extending downward from it, and having rotational axes substantially parallel to each other, is taught by HERTER (figure 1).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 4,374,488 to PETERSON.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Janca whose telephone number is (571) 270-5550. The examiner can normally be reached on M-Th 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on (571) 272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJJ

/Barbara L. Gilliam/
Supervisory Patent Examiner, Art Unit 4128